

The objection to claims 7, 8, 10-14, 16-21, 23-25 and 28 under Rule 112, first paragraph, has been rendered moot by their cancellation. The subject matter of claim 17 has been added to claims 15 and 29, thus meeting the Rule 112, first paragraph, objection thereto advanced on page 3, third paragraph, of the outstanding Office Action. Claim 22 has been amended as requested to provide that the charge transport layer is the surface layer. Claims 15, 26 and 27 have been amended to recite a photosensitive member in accordance with the Examiner's suggestion. Accordingly, the objections under Rule 112, first paragraph, having been met, should be withdrawn.

The phrase "without said photosensitive member retaining the developer image therein" in claims 15 and 27 is supported, *inter alia*, on page 15, lines 2-10 and page 26, line 16. In Experiment 1 idle rotation was conducted "without development" (page 15, line 10).

Pending claims 15, 22 and 26 were rejected as anticipated by, or as obvious over, Oshiba '085. Claims 15 and 22 were rejected as anticipated by, or as obvious over, Okado '702. Claim 27 was rejected over Oshiba '085 in view of Hanami '099. The grounds of rejection are respectfully traversed.

It is a feature of the present claimed invention that an average particle diameter and a total weight of scraped particles are recited wherein the scraped particles are formed from a photosensitive member scraped by a cleaning member at a time when the photosensitive member does not have a developed image thereon (or during idle rotation). This is shown in Experiment 1 as commented upon on page 26. Further, the claims recite specific scraping parameters of abutment pressure and surface scraping length. When a

photosensitive member satisfies these features, streaked images are inhibited from forming and smeared images (image-flow) is inhibited due to use of, inter alia, a contact charging member.

Oshiba '085 requires that cleaning be conducted during a cycle where a developed image is formed and transferred, column 7, lines 1-8 and claim 1. Okadao '702, likewise, requires cleaning to be conducted during an image developing cycle.

Accordingly, none of the primary references disclose measuring scraped particles after a scraping cleaning during idle rotation (without the photosensitive member retaining a developed image). The key features of the present invention include providing a photosensitive member having specific surface properties measured during idle rotation, i.e., average scraped particle diameter and total weight of scraped particles produced. During idle rotation there is no developing step and no residual toner is present to be scraped. Therefore, the scraped particles are not toner or residual toner, but are particles of photosensitive layer only. The primary references do not teach or appreciate the need for measuring scraped particles during idle rotation to ensure a suitable photosensitive member free from streaking and image-flow otherwise resulting from contact charging.

In certain isolated instances particles in the comparative tests in the specification did not produce streaked images or image flow. However, the trend was clear that both scraped particle diameter and scraped weight must be within Applicant's claimed parameters to achieve a satisfactory member.

As long as the photosensitive member produces the claimed scraped particles, then it will provide images with reduced streaking and image flow. One of

ordinary skill can determine by routine experimentation according to the instant invention, whether a photosensitive member will provide the indicated properties. The comparative tests are therefore applicable to a broad range of photosensitive members. There is no need to limit their scope to specific ingredients.

The cited references, while including PTFE particles in a charge transport layer, provide no teaching necessary for inherently achieving the instant invention. Any photosensitive members produced by the cited art will not be understood or be appreciated as producing the instant scraped particles. Unappreciated results cannot be the basis of an anticipation or obviousness rejection.

Therefore, it is respectfully requested that the claims be allowed and that the case be passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

  
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VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

--15. (Amended) A process unit [for cleaning a member on which a developer image is to be formed] comprising:

(a) a photosensitive [an image bearing] member for retaining a developer image thereon; [and]

(b) a charging member in contact with the photosensitive member  
for charging the photosensitive member; and

(c) a cleaning member for cleaning a surface of [the image bearing] said photosensitive member by scraping the surface of [the image bearing] said photosensitive member,

wherein the surface of [the image bearing] said photosensitive member produces scraped particles of said surface, said particles have [having] an average particle diameter of 9  $\mu\text{m}$  or less and a total [scraped] weight of the scraped particles [of at least] is 16 mg or more per a length of  $2.8 \times 10^2$  mm in a longitudinal direction of said photosensitive member, when the surface of said photosensitive member is scraped by [the] said cleaning member without said photosensitive member retaining the developer image thereon under conditions in that said cleaning member abuts said photosensitive



member at an abutment pressure [from] of 20-80 gf/cm [for] and a surface length [of] in a lateral direction of said photosensitive member scraped by said cleaning member is 1.0  $10^6$  mm.

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22. (Amended) A process unit according to claim [21] 15, wherein [the image bearing member] said photosensitive member has a charge generation layer and a charge transport layer and the surface of said photosensitive member is the charge transport layer.

26. (Amended) A process unit according to [any one of claim 15-20] claim 15, wherein the cleaning member is shaped as a blade and the blade is in contact with the surface of [the image bearing] said photosensitive member in a direction counter to a moving direction of the surface of [the image bearing] said photosensitive member.

27. (Amended) A process unit according to claim [16] 15 detachably mountable to a main body of an image forming apparatus.

29. (New) An image forming apparatus comprising:

- a photosensitive member which can retain a developer image thereon;
- a charging member in contact with said photosensitive member for charging said photosensitive member;



(c) image forming means for forming the developer image on said photosensitive member; and

(d) a cleaning member for cleaning a surface of said photosensitive member by scraping the surface of said photosensitive member,

wherein the surface of said photosensitive member produces scraped particles of said surface which have an average particle diameter of  $9 \mu\text{m}$  or less and a total weight of the scraped particles is 16 mg or more per a length of  $2.8 \times 10^2$  mm in a longitudinal direction of said photosensitive member, when the surface of said photosensitive member is scraped by said cleaning member without said photosensitive member retaining the developer image thereon under conditions in that said cleaning blade abuts said photosensitive member at an abutment pressure of 20-80 gf/cm and a surface length in a lateral direction of said photosensitive member scraped by said cleaning member is  $1.0 \times 10^6$  mm.--

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